OLIVE LEAF PATTERN.

From The Weekly Tribune.

Counterpanes, tidies and the like are knit in stripes as well as in squares, and a combination of both forms is often exceedingly effective. The following stripe may, for example, be used between the rows of large squares of the Raised Leaf Pattern given last week :

Cast on 38 stitches with 4 extra for edge stitches -2 on each side, 1st row : Knit 2, purl 2, " narrow (by knitting 2

together), knit 11, purl 2, over twice, knit 1, over twice, purl 2, repeat from *; knit 2. 2d row : Knit 2, knit 2, * purl 3, knit 2, purl 10,

purl 2 together, knit 2, repeat from *; knit 2. Remember that the second loop of the "over twice" is to be dropped throughout the pattern. Also that in "over twice" before a purl stitch the cotton is brought forward and then carried twice

around the needle.

3drow: Knit 2, purl 2, "narrow, knit 9, purl 2, knit 1. over, knit 1, over, knit 1, purl 2, repeat from

4th row : Knit 2, knit 2, * purl 5, knit 2, purl 8 purl 2 together, knit 2, repeat from *; knit 2. 5th row : Knit 2, purl 2, " narrow, knit 7, purl 2, knit 2, over, knit 1, over, knit 2, purl 2, repeat from " : knit 2. 6th row : Knit 2, knit 2, * purl 7, knit 2, purl 6

purl 2 together, knit 2, repeat from *; knit 2. 7th row : Knit 2, purl 2, "narrow, knit 5, purl 2. kmit 3. over, knit 1, over. knit 3, purl 2, repeat from *, knit 2. 8th row: Knit 2, knit 2, *purl 9, knit 2, purl 4,

purl 2 together, knit 2, repeat from *, knit 2. 9th row: Knit 2, purl 2, "narrow, knit 3, purl 2, knit 4, over, knit 1, over, knit 4, purl 2, repeat frome: knit 2.

10th row: Knit 2, knit 2, *purl 11, knit 2, purl 2, part 2 together, knit 2, repeat from"; knit 2. 11th row: Knit 2, purl 2 * narrow, knit 1, purl 2, knit 5, over, knit 1, over, knit 5, purl 2. repeat

from * knit 2. 12th row: Knit 2, knit 2, * purl 13, knit 2, purl 2 together, knit 2, repeat from *, knit 2. 13th row: Kuit 2, purl 2, over twice, knit 1 over twice, purl 2, narrow, knit 11, purl 2, repeat

from *, knit 2. 14th row : Knit 2, knit 2, *purl 10, purl 2 to gether, knit 2. purl 3, knit 2, repeat from "; knit 2. 15th row: Knit 2, purl 2, *knit 1, over, knit 1, over, kmit 1, purl 2. narrow, knit 9, purl 2, repeat

from*, knit 2. 16th row : Knit 2, knit 2, *purl 8, purl 2 to gether, knit 2, purl 5, knit 2, repeat from*, knit 2. 17th row: Knit 2, purl 2, *, knit 2, over, knit 1, over, knit 2, narrow, knit 7, purl 2, repeat from *

18th row: Knit 2, knit 2, *. purl 6, purl 2 together, knit 2, purl 7, knit 2, repeat from "; knit 2. 19th row: Knit 2, purl 2 ", knit 3, over, knit 1, over, knit 3, purl 2, narrow, knit 5, purl 2, repeat

from "; Knit 2. 20th row : Knit 2, knit 2, * purl 4, purl 2 together, knit 2, purl 9, knit 2, repeat from *; knit 2. 21st row: Knit 2, purl 2, * knit 4, over, knit 1.

over, knit 4, purl 2, narrow, knit 3, purl 2, repeat from " ; knit 2. 22d row : Knit 2, knit 2, * purl 2, purl 2 together.

knit 2, purl 11, knit 2, repeat from *; knit 2. 23d row: Knit 2, purl 2, *knit 5, over, knit 1, over, knit 5. purl 2, narrow, knit 1, purl 2, repeat from *; knit 2.

24th row: Knit 2, knit 2, purl 2 together. knit 2, purl 13, knit 2, repeat from "; knit 2.

Repeat from the beginning. If a wider stripe is
desired add 19 stitches for each additional pattern. and repeat the directions between the stars for

TIDY IN KNITTING.

every pattern added.

Mrs. L. B. sends "a pattern for a very pretty tidy as some compensation for the many beautiful ones" she has found in these columns. Take cotton No. 12, 14 or 16. Every alternate

row is to be purled except 3 stitches on each edge, which are always to be knitted plain. Cast on 11 stitches for each pattern and 6 more for the edge. Nmety-four stitches will make a tidy of medium width.

Kuit 3 plain rows to begin. 1st pattern row : Knit 3 (edge) stitches, *, knit 3 together, knit 1, over, knit 3, over, knit 2 together twice : repeat from ".

2d row : Purl ; 3 stitches plain on each edge. Every alternate row the same as the second. 3d row: Knit 2 together, over, knit 2 together, knit 1, over, knit 1, over, knit 2 together, knit 1,

it 2 together, repeat. 5th row: Knit 2 together, knit 2, over, knit 3, over, knit 2, knit 2 together, repeat.

7th row: Knit 2 together, knit 1, over, knit 5, over, knit 1, knit 2 together; repeat. 9th row: Kuit 2 together, over, knit 1, over, knit 2 together, knit 1, knit 2 together, over, knit 1,

over, knit 2 together ; repeat. 11th row: Knit 1, over, knit 2 together, knit 1, over, knit 3 together, over, knit 2 together, knit

1. over, knit 1; repeat.
13th row: Knit 1, ever, knit 3, knit 2 together, anit 4, over, knit 2 together : repeat from." 15th row : Knit 1, over, knit 1, over, knit 2 together 4 times, over, knit 1, over; repeat.

17th row: Knit 1, over, knit 2 together, knit 1 over, knit 2 together twice, over, knit 2 together, knit 1, over : repeat. 19th row : Knit 2, over, knit 2, knit 2 together

twice, knit 2, over, knit 1 ; repeat. 21st row : Kuit 3, over, knit 1, knit 2 together twice, knit 1, over, knit 2 ; repeat. 23d row: Knit 1, knit 2 together, over, knit 1,

over, knit 2 together twice, over, knit 1, over, knit 2 together: repeat. 25th row : Knit 2 together, over, knit 2 together. knit 1, over, knit 2 together, over, knit 2 together,

knit 1. over : repeat. 27th row : Kuit 1, knit 2 together, knit 2, over knit 1, over, knit 2, knit 2 together, knit 1; repeat Begin again at 1st pattern row, and repeat the pattern to the length you wish.

FLUTED LACE.

N. A. P. kindly sends a sample of pretty fluted face with these directions for making it : Cast on 18 stitches.

1strow: "Knitacross plain 2d row : Purl 14; this leaves 4 stitches on the left needle : turn the work as if to begin at the end 8d row: Slip the first of the 14 stitches from the

left needle on to the right one; knit 9, narrow. over, knit 2. 4th row : Purl 14 ; turn the work as in 2d row.

5th row: Ship the 1st of the 14 stitches as in 3d row; knit 13; this ends the 1st quill or fluting. Now begin the 2d: 1st row : Knit plain across.

2d row : Knit 4. purl 14. 3d row: Knit 1, narrow, over, knit 11; turn the work. 4th row : Slip the 1st of the 14 stitches as before,

5th row: Knit 18 across plain*. Repeat from first * to the last, thus making 2 quills. This lace can be made of any width desired for children's ruffles. The addition must be made in the plain work, the edges remaining as above.

KNITTED LACE.

This edging is excellent for all washing articles, as it is strong and does not stretch. Cast on 8 stitches and knit across plain.

1st row : Slip 1 with the thread before the needle as in purling: put the thread back and knit 1, over, knit 2 together, knit 2 plain, over twice, knit the rest plain.

.2d row : Slip 1 as above, then knit plain till you some to the long loop made by "over twice;" knit the 1st, purl the 2d, the rest knit plain. 3d row : Slip 1, knit 1, over, knit 2 together, knit

the rest plain. 4th row : Slip 1, the rest plain. 5th row: Slip 1, knit 1, thread forward, knit 2 together, knit 2, over twice, the rest plain. Knit

the 6th row like the 2nd, and the 7th row like the 8th row: You should now have 12 stitches. Cast off four, being careful to slip the 1st, as in

purling. This makes the pattern. Begin again at

A PRETTY EDGING.

Mrs. G. M. M. wishes to contribute to the knitting column the following pattern which she says is very pretty and easily knitted: Cast on 14 stitches. First row: Slip 1, knit 1, over, narrow, 1 plain,

over and knit 2 together 4 times, 1 plain. 2d row: First make 1, then knit across plain. Every alternate row the same. 3d row: Slip 1, knit 1, over, narrow, 2 plain, over

and knit 2 together 4 times, 1 plain. 5th row: The same as 3d, only 3 plain, over and knit 2 together 4 times, 1 plain. 7th row: The same as 3d, only 4 plain, over and

knit 2 together 4 times, 1 plain. 9th row: The same as 3d, only 5 plain, over and knit 2 together 4 times, 1 plain. nit 2 together 4 times, 1 plain.

11th row: The same as 3d, only 6 plain.

12th row: Cast off 5, kmt the remaining stitches plain. Eegin at 1st row.

SCRAP BAG. ECRU THREAD.—C. F. G., who sends a pattern for knitted lace given above, sends also a sample of the same in pretty écru linen thread. She says that nice openwork mitta and stockings can be knitted nice openwork mitts and stockings can be knitted with this thread. They are cool and neat for Summer wear. She aeds that "The Tribune knitting patierns are much superior to those printed elsewhere, in that they come out right." She asks about "twist-stich." This is made by knitting from the back part of the loop or stitch on left needle. The right needle is put in behind the left needle and passes through the loop from right to left, much the same as in purling, except that in purling the needle is passed through the front part of the loop.

Kensington Embroiders.—E. H. B. will proba-

KENSINGTON EMBROIDERY.—E. H. B. will probably find her wants supplied by a book called "Artistic Embroidery," published by Adams & Bishop, 46 Beekmau-st., N. Y.

Grocheted Afghan.—N. A. P. sends these directions for a pretty aighan for a child's carriage or crib. Make a chain 1½ yards long, crochet 6 DC, miss 2, then 6 DC and 3 DC in the 7th stitch. This forms one scollop and is to be repeated across the chain. Turn and crotchet DC in each back stitch. Always miss the 2 stitches in the same place and crochet the 3 in the centre of the highest points each time across. It is lovely made in light shades of Germantown, and it would be handsome in the same colors used for the "Koman Afghan," This department is pleased that N. A. P. enjoyed the novel sent to her. It will always be glad to print her patterns. Many responses have been received to her request for the carly chapters of "Probation." If she will mention the dates and numbers of the papers she wants, one of these kind readers will send them to her. L. A. C. says: "There is something in the few words she has written that has gone straight to my beart, and I would like to say to her, 'Be hopeful; hear your sickness one day at a time, and may God in His loving kindness give you, as he has me, after being long an invalid, a moderate degree of health and a heart made render and mindful of the sufferings of others."

Herring-Bone Stitch.—Mrs. S. B. G. in sending directions for making this stitch says: "I have been a reader of The Tribung for years. I thought CROCHETED AFGHAN.-N. A. P. sends these direc-

Herring-bone Stitch.—Mrs. S. B. G. in sending directions for making this stitch says: "I have been a reader of The Tenburf for years. I thought it just perfect but since the addition of the kintting column find it did lack something. Have tried nearly all the insertions and edgings with success." For the "Herring-bone stitch," cast on any number that will divide by 6. Knit 3 rows: 2d row purf. Ist and 3d plain. 4th row: Knit plain with the thread 3 times over the needle. 5th row: Slip off the first 6 stitches the full length, pass the 4th, 5th, and 6th through the first 3, then kait plain the 4th, 5th and 6th through the 1st, 2d and 3d. Take of every 6 stitches in this way and knit the whole row. Repeat.

Miscellansfolus,—Miss A. H. Rhodes asks if the

row. Repeat.

Miscellaneous.—Miss A. H. Rhodes asks if the directions in the 9th row of Adelaide's lace—" over twice, narrow 3 times"—mean that the "over twice" is to be repeated before each narrowing. It does; but the directions would have been planter if they had read "over twice and narrow three times." The tenth line shows, however, that the "over twice" should be repeated as well as the nar-

D. C. FRENCH, THE CONCORD SCULPTOR.

Prom The Boston Heraid.

Five years ago, art lovers in this country, and patriotically inclined people who took an interest in the centenary celebrations then beginning, were surprised to see springing out of the soil, on the field of Concord fight, a lithe-looking bronze ligare, by a new sculptor, which was instinct with genius. This figure was the now well-known "Minute Man," and the new sculptor was Deniel Chester French, a resident of the town of Concord. His father, the Hon. H. T. French, Assistant Secretary of the Treasury of the United States, owns a farm here, on which is a comfortable and dignified old dwelling house, surrounded by a velvet lawn. The studio also faces the road, a few rods away from the house, and separated from it by a short stretch of appleorchard. It is built of wood, in a species of Queen Anne style, after a plan made by Mr. French himself, and on the outside is finished with a coating of gray-green mastic part way up, the remainder of the wall being sheathed with round, dark red singles, which join the purple-brown roof. He does not confine himself to it altogether, having from time to time a working-room in Boston, where he receives sitters for portrait busts. He works in his studio or in Boston pretty much at all times of the day; one of the peculiarities of his craft being that after a work is once begun it cannot be left alone, on account of the necessity for keeping the clay moist. During the Winter's work on the colossal group, too, fires had to be kept up night and day in the studio, to avoid the nossibility of frost affecting the damp material, and destroying in an hour the result of months of toil.

Although identified with Concerd in the public mind, Mr. French is not a native of the town. He

avoid the nossibility of frost affecting the damp material, and destroying in an hour the result of months of toil.

Although identified with Concord in the public mind, Mr. French is not a native of the town. He was born at Exeter, Mass. April 20, 1850, and afterward removed to Cambridge, where his father lived for a number of years, and he himself received his schooling. It was here that he made his first essay in statuary, modelling a lion in snow one Winter's day, which attracted crowds of curious people while it remained unmeited. It is said that, some years later, when he went to study with the greatest of American sculptors, J. Q. A. Ward, Ward said to him, langhingly: "Don't model a statue in snow, whatever you do." But the advice came too late.

It is a singular fact that Judge French, who has always had a strong taste for artistic productions, had settled it in his mind that Daniel's elder brother, William, was to be a sculpter, and had tried to stimulate in him the desire to become one, by furnishing him with clay and modelling tools. But William, somehow, was not inclined in that direction. He has since become a painter, and is connected with the reorganized Academy of Fine Arts at Chicago, in the capacity of instructor. The father of these two artists appears to have given up his plan of moulding a sculptor after the first failure, and accordingly Daniel was not given any clay; but, following the paternal taste, he interested himself in observing works of sculpture and in reading hooks on that art. It was not until be came to Concord, some ten years ago, that the late May Alcott. Nieriker, thinking she detected genus in him, and having a greatenthusiasm for the development of art among her townsfolk, gave the young man proper materials to work with, and ursed him to try modelling. From that moment his career was settled. Miss May Alcott was v.ry fond of owls, and made some good pictures of which they were the subjects, and it may have been due to this that one of the first attempts of the young scu this that one of the first attempts of the young sculp-for was a bair of owls on a reduced scale, perched on one branch and sidling up against each other with a quizzical air. This, executed in plaster, be-came very popular, and may still be seen in the shop windows.

windows.

His choice of a profession having been made, young Mr. French went to New-York to take instruction from J. Q. A. Ward. Mr. Ward, having at that time attained celebrity and executed works of exceedingly high merit without ever having been to Europe, advised his pupil to remain in the United exceedingly high merit without ever having been to Europe, advised his pupil to remain in the United States until he had attained a riper growth. Afterward, when he had himself made a tour abroad, he returned full of enthusiasm, and urged French to cross the water as speedily as possible. In the meantime French had received a commission from the town of Concord to make a statue for the new centenary battle monument, and had completed his "Minute Man."; thus achieving his first work without having exposed himself to European influences. "Minute Man": thus achieving his first work without having exposed himself to Luropean influences.

One of Mr. French's works in relief is an ideal head of Elsie Venner, giving the artist's interpretation of Dr. Holmes's famous herome. He has preserved the plaster mould from which this relief was made, and, being cut instead of projecting, it serves as an ataglio. At a little distance the light and shade give to the head the appearance of projecting, so that all the effect of the relief itself is obtained. The face is a peculiar one, with a slightly retreating, ophidian forehead, and a strange expression about the features; but it is, at the same time, a beautiful face. The sense of something mysterious in it is heightened by the sinuous locks of hair falling down to the neck, and a narrow necklace, the woven scales of which suggest a serpent.

EARTH EATING IN JAPAN.

From The English Mechanic.

It is rather surprising to find that some of the Japanese are addicted to the eating of earth. Dr. Love has lately published an analysis of a clay which is eaten to a considerable extent by the Ainos; it occurs in a bed several feet thick, in the valley of Tsietonal (eat-earth valley), on the north coast of Yesso. It is light gray in color and of fins structure. The people mix with the clay fragments of the leaf of some plant for the aromatic principle it contains. They eat the earth because they think it contains some beneficial substance, not because it is a necessity with them. They have meat in abundance of vegetable food. The clay is eaten in the form of a soup. Several pounds are boiled with lily roots in a small quantity of water, and afterward strained. The Ainos pronounce the soup very palatable.

CORMORANT FISHING IN CHINA.

CORMORANT FISHING IN CHINA.

Cormorants are used for river fishing. The most celebrated place for breeding them is T'anghsichen. The inhabitants are believed to possess a secret in cormorant-rearing which gives them special success. The common name yn ying (fish-lawk), or yu ya (fish-crow). The females lay yearly from three to nine eggs, but the eggs of the first scason (first moon) are the only ones retained for hatching, which are given to hens to hatch, as the female cormorant is a careless hother.

the weather being too cold. The young birds are first jed with a mixture of beancurd and are first jed with a mixture of beancurd and raw eels' flesh cut fine. The price of a male is 1dol, or 2dol,, and a female half as much. When they have attained their full size a string When they have attained their full size a string is tied to one leg, the other end of it being fastened to the bank of a pond or canal. They are then made to go into the water, the trainer whistling a peculiar call, and using a bamboo to force them. Small fish are thrown them, upon which they pounce greedily, as they have been kept on short allowance of food. They are now called back by a different whistle call, and forced to obey by means of the string. As they reach the shore more fish is given them. This teaching having been gone through daily for a month, another four or five weeks are for a month, another four or five weeks are spent in training the birds from a boat. At he end of this period the string is generally dispensed with.

The teaching being completed, the cormorants The teaching being completes, the combinates are fed sparingly. A small hemp ring is tied round their necks to prevent them from swaltowing large fish, and they are taken on board the small boat called "cormorant boat" to the number of ten or twelve. They are now as docile as dogs, and sit perched on the side of the bast well they are sent into the water by a the boat until they are sent into the water by a whistle from the master. They dive after fish, and bring their prizes to the boat firmly held in their hooked beaks. When a fish is too large for one bird three or more join their forces and senting the continuous of the continuous of the continuous transfer in the continuous of the con and capture it together. After fishing two or three hours the birds are allowed to come on board and rest. At the end of the day the hempen string is loosened or removed altogether, and they are either allowed to fish for themselves or are fed by the hand of their master. A commorant holds out for five years.

THE NEXT TOTAL SOLAR ECLIPSE.

A recent paper by Mr. D. P. Todd, of The American Ephemeris office, gives some valuable hints for the use of the electric telegraph in total solar ecluses. Taking as an example the next total ecuse of the san, on May 16, 1882, it is remarked that the path of totality lies almest wholly on hand. Beginning in Western Africa, with a northeasterly direction, it crosses Upper Egypt and the Red Sca, passing a few miles south of Bagdad and Teheran, and thence traversing Central Asia it leaves that continent near Shanghai. Thus several widely-separated is gions, connected by telegraphic cables and land liaes, are upon the track of the central eclipse. Mr. Todd remarks that from El-Akhmym, on the Nile, a line runs north to Alexandria, from which place Teheran is directly necessible by telegraph. From Teheran a fand time runs southeast through Beloochestan and Hindostan to Madras, which is connected by cable-lines with Singapore, Hongkong, and Shanghai. He points out that an THE NEXT TOTAL SOLAR ECLIPSE.

chestan and Hindosian to Madras, which is connected by cable-lines with Singapore, Hongkong, and Shanghai. He points out that an
additional advantage attaches to this eclipse
from the circumstance that there is a duplicate
line of telegraphic connection between Egypt
and Shanghai by way of Constantinople,
Vienna, and Moscow, and thence by the Russian
line through Siberia to Wladiwostok, and
thence to Saanghai.

Supposing, then, that an intra-Mercurial
planet were discovered during totality in Egypt,
a duplicate message might be sent, to insure
herond doubt that fac discovery should be
known to observed at El-Akhanym, forty-five minures of absolute time clapsing before the
shadow reaches Teheran, the position might be
telegraphed to the latter station so as to give shadow reaches Teheran, the position might be telegraphed to the latter station so as to give the observer abundant time to verify the discovery, while observations at both places might be telegraphed to Shanghai, which the shadow will not reach until more than two hours after leaving Teheran. Mr. Todd thinks the telegraph companies, with the courtesy they have always shown in scientific undertakings, would tender every assistance in carrying out such a scheme.

THE TRANSIT OF VENUS.

At the last meeting of the Royal Astronomi-At the last meeting of the Royal Astronomical Society, Sir George Airy read a paper on the preparations to be made for observing the next transit of Venus, which occurs December 6, 1882. The chief phases to be observed are the ingress and erress of the planet on the san's disk, and each of these phases is watched from two points, one where it is accelerated, the other where it is accelerated, the other where it is retarded. For ingress accelerated, the Astronomer Royal recommends stations in Cape Colony, South Africa, from the Cape Observatory to Durban, with an elevation of the sun function, from 222 to 442. For the Cape Observatory to Durban, with an elevation of the sun rancing from 33° to 46°. For ingless retarded, Mr. Airy had formerly proposed to depend upon stations on the coast of the United States and Canada; but as the elevation of the sun will be only from 15° to 18°, he now prefers the whole chain of the West India Islands, with an elevation of from 23° to 43°. The longitudes of these stations have been determined with great accuracy by American observers. Bermuda, with an elevation of been determined with great accuracy by American observers. Bermuda, with an elevation of 25°, would also be very favorably situated for this phase of the transit. All these scattens are also suitable for the egress ac elerated phase. For egress retarded, although Melbourne, with For egress retarded, although Melbourne, with elevation 10°, Sydney, elevation 14°, and New-Caledonia, elevation 22°; are suitable, the Astronomer Royal would depend chiefly on New-Zealand, where the elevation of the sun will range from 30° to 35°. Sir George Airy also urged that the history of previous observations, and especially that of the transit of 1761, should be carefully studied by intending observers. Among the records of that transit would be found a mention of the ring of light when had mexical observers so much in 1874.

which had puzzied observers so much in 1874. MEAT BREAD.

M. Scheurer-Kestner, says The English Me chanic, has discovered the remarkable fact that the fe.mentation of bread causes the complete digestion of meat. He found that a beefsteak, origestion of meat. He toling that a beetsteak, cat into small picces, and mixed with flour and yeast, disappeared entirely during the process of bread-making, its natritive principles being incorporated with the bread. The meat would also appear capable of preservation for an indefinite process in its new of the for borress of midbread made in 1873 were submitted to the

French Academy of Science, when not a trace of worms or mouldiness was observable.

At the beginning of his experiments, M. Schearer-Kestner used raw meat, three parts of which, finely mixed, he mixed with five parts of which, finely mixed, he mixed with five parts of flour and the same quantity of yeast. Suffi-cient water was added to make the dough, which in due time began to ferment. After two or three hours, the meat disappeared, and the bread was baked in the ordinary manner. Thus prepared, the meat-bread had a disagree-Thus prepared, the meat-bread had a disagree-able sour taste, which was avoided by cooking the meat for an hour with sufficient water to moisten the flour latterwards. The meat must be carefully deprived of fat, and only have sufficient salt to bring out the flavor, as salt by absorbing moisture from the air would tend to spoil the bread. A part of the beef may be re-placed with advantage by salt, laid, which is found to improve the flavor. The proportion found to improve the flavor. The proportion of meat to flour should not exceed one-half, so as to insure complete digestion. Bread made with a suitable proportion of yeal is said to furnish excellent soup for the sick and wounded.

FISH ON THE PACIFIC COAST.

As a result of the labors of the members of the United States Fish Commission on the Pacific coast, there have been forwarded over one and a half tons of specimens of fish to the Smithsonian Institute at Washington. Fifty of cach kind have been sent, so as to make a working series in each variety, and also to permit of duplicates being sent to the British Museum, the Jardin des Plantes in Paris, and Museum, the Jardin des Plantes in Paris, and the other important museums of the Continent. There are, up to this time, 252 known species of fish on the Pacific coast between Victoria, Vancouver Island, on the north, and San Diego, California, on the south, of which some 200 have already been sent to Washington. Of the total number, forty-six are new species innave already been sent to washington. Of the total number, forty-six are new species indigenous to those waters, thirty-one of them having been discovered by Protessor Jordan. Several sharks have been found, among them a large "man-eater" shark, the first recorded one taken on that coast. In the stowach, is stated by the fishermen who caught it, was found a sea-lion which weighed a little over one hun-dred pounds. These sharks resemble the comdred pounds. These sharks resemble the com-mon European sharks. This is an interesting

SCIENCE FOR THE PEOPLE. fact for natural historians, as showing the wide extent of sea over which they range.

> EXPERIMENT IN MAGNETISM. An interesting experiment in magnetism has been described to the French Academy by M. Obalski. Two pragnetic needles are suspended by fine threads attached to unlike poles, over water in a vessel. Their distance from each other is a little greater than the sum of their radii of mutual attraction, and their poles are opposite each other. The water is gradually brought up over them by means of a tube of caoutchoue, connected with the vessel and wound on a drum. When immersion begins, the needles approach each other by their immersed parts, and when the immersion has reached the third or fourth of the needles' length, they go together. The explanation seems been described to .ne French Academy by M. length, they go together. The explanation seems to be that what hindered the approximation of the needles was their own weight; and the force of gravity being weakened by the immersion, the magnetic forces become manifest. A corresponding though opposite phenomenon is witnessed when the needles are suspended by

> > VEGETALINE.

their poles of the same name.

VEGETALINE.

A new compound has been patented in England under the name of Vegetaline, which is intended as a substitute for ivory, coral, leather, caoutchoue, etc. It is prepared as follows: Cellulose (woody fibre), from any source whatever, is treated with sulphuric acid of 58° B. (=sp. grav. 1.676) at 15° C. (=59° Fahr.), then washed with water to remove excess of acid, dried, and converted into a fine powder. This is mixed with resin-soap, in a mortar, and the soda of the soap is removed by treatment with suppliate of aluminum. The mass is now collected, dried again, and pressed into cakes by hydraulic pressure. These cakes are then cut into thin plates, which are shaped by again subjecting them to pressure. By adding castor-oil or glycerine to the mass before pressure, the product may be made transparent. Colors may be imparted by the use of vegetable coloring agents. Facts respecting the strength and clasticity of this product are wanting.

A DRIED UP LAKE.

Where at one time, says The Eureka Leader, was Ruby Lake there is now not a drop of water. Seven or eight years ago this sheet of water was from 18 to 20 miles long, and varied in was from 18 to 20 miles long, and varied in breadth from half a mile to two or three miles and in a number of places was very deep. The lake was fed by numerous springs along the foot of Ruby Mountain, and was the largest body of water in Eastern Nevada. For some years past it has been gradually drying up until it has at last totally disappeared. No cause for its disappearance can be assigned. The Ruby range of mountains is considered the Ruby range of mountains is considered the largest and finest between the Rocky Mountains and the Sierra Nevadas, and besides being well wooded has been the best watered mountain range in Nevada.

ELECTRO GILDING. Electro gilding in various colors may be eadily effected, says The Engineer, by adding Electro gilding in various colors may be readily effected, says The Lagineer, by adding to the gold bath small quantities of copper or silver solution until the desired tint is obtained. A small quantity of silver solution added to the gilding bath causes the deposit to assume a pale yellow tint. By increasing the dese of silver solution a pale greenish tint is obtained. Copper solution added to the gold bath yields a warm red gold tint. It is recommended to use a current of rather high tension such as that of the Bansen battery for depositing the alloy of gold and copper.

A SUBSTITUTE FOR GOLD.

Many are the compounds put forward with more or less success to imitate gold. A new preparation, says Iron, is made of copper, 100 preparation, says Pron, is more of copper, 100 parts; pure tin, 17; manganese, 6; common tartar, 9; ammonia, 3.60; and chalk 1.60. This is said to torm so close an imitation of the precious metal that It can only be distinguished from it by the difference in weight. The alloy can also be worked into leaves almost as thin as those of goid.

THE LADIES' MILE ON A JUNE MORNING.

From London Society.

A rare June day, a plea ant scene,
A gracious air, a sky unclouded—
How sweet those elms' new-budded green!—
The Ladies' Mile is crowded.

A gay kaleidoscopic show,
In combinations all mending,
The restless fragments come and go,
Revolving, parting, blending. O, there are forms of Juno-mould, And palfreys perfect in their paces, And trees a blue k and brown and gold, And proud and requant faces.

One face, amid a hundred here, More ripely rounded, richly tinted; One roble face—how soft and deart— Upon my heart is printed. Sweet, in those far-off wistful eyes,
The jungling life around onbeeding,
I think a pure heart-history lies,
Not difficult of reading.

I think, ere London whirl and strife Involved you in their 'wildering mazes, You by d a snople masteral life Among your birds and daisies.

I think you think you'd gladly change Your throne above the rival beauties For that old life's unfettered range, Its thoughts and dreams and duties. I think 'twere sweet to lead you back,

And watch (as London's towers should dwindle) Your soft cheeks win the bloom they lack, Your great eyes tlast and kindle. I think--but, see, she rides away ;

She nears the arch in canter rapid; She's gone; the sanshine fails the day, The Mile is stale and varied. LITERARY RECLUSES. .

Prom Chambers's Journal.

Mr. Ryau, librarian of the Kilkeney Library Society, made books his idos, denying himself every luxury and not a few necessaries in order to add to his collection; the well-furnished library of which he was custodian being insufficient to satisfy his literary cravings. He lived in the apper part of the society's premises, but admitted no one to enter his rooms for any purpose whatever. On his sudden death, in 1866, their privacy was perforce invaded. His bedroom, or what passed for such, was found to contain nothing in the way of furniture save an old sofa, which had served him for a bed, upon which lay a pair of old blankets, his add nightly covering. Piles of books were heaped up promiseuously in every direction. So in his acting-room, there was scarcely space to move for dust-covered volumes, of which the owner had apparently made very little use, contented, like many another collector, with merely having acquired them.

A wealthy eccentric living in a French provincial town was not open to that reproach. He dwelt alone in a secluded house, admitting no one but a charwoman, who prepared his meals, and a news agent, who brought him thirty or forty journals at a time. One day even they could not obtain admission, and the police were called upon to intervence. Upon entering the solitary bedroom in the house—a room as squalid as it well could be—the recluse was found dead on the bed, which could only be reached by passing through a ravine, the sides of which were composed of thousands of newspapers and novels, whose perusal had been the sole delight and occupation of his wasted life.

ETON MANNERS.

From The Philadelphia Telegraph.

About a year ago, while near Windsor, I lost my way, and chancing to meet a young Etonian, clad in the traditional short lacket, stove-pipe hat, and turned-down coltar, which excite so much amused wonderment in the American mind. I politely asked him if I were in the right path. The young black-guard took no more notice of my civil question than if I had been a stone, but went on his way with an imperturbable equanimity which would have been amusing were it not so disgusting. I wonder what that ill-bred cub would have thought had I told him what was on the tip of my tongue to let him know, i. e., that, with all his conceited airs, he was not only receiving his education like a pauper, but was depriving some other had of his just rights.

The explanation of the young patrician's insolence was given to me afterward. It seems that we "hadn't been introduced, you know," and Etoniaus carry their exclusiveness to such a pitch that they will not, if they can possibly avoid it, hold the slightest communication with any one with whose antecedents they are not familiar, or who has not been vouched for by a proper introduction. Had I heard this story second-hand, I should hardly have credited it, but as the incident occurred to myself, I can vouch for its accuracy; and a lady of good birth and station, to whom I mentioned the circumstance, assured me that she experienced a similar sample of Etonian politeness. When men in the late Prince Albert's position will not contaminate themselves by receiving a gun direct from the vulgar hands of their game keeper, When men in the late Prince Albert's position will not contaminate themselves by receiving a gan direct from the vulgar hands of their game keeper, it is perhaps not so very singular that the younger generation of patricians can find no botter means of asserting their dignity than by the exercise of such insolence as would disgrace the dirtiest mudlark that paddles about the streets of London.

RELIGIOUS INTELLIGENCE.

Pastorless Churches.—The facts which came out at the recent General Assembly of the Presbyterian Church respecting churches which have no pastors, give interest to what is called an "overture" to the Assembly from the Presbytery of Iowa City, showing what the Presbytery believes to be in large measure the cause of these vacant pulpits. The overture is an earnest—an almost spainfully earnest—protest against a too great dependence on the minister for the prosperity of the church, and the evil is declared to be so great that it is difficult to frame a sentence that shall compass all its phases. Extraordinary mental gifts are demanded, and if the minister fails to give popular preaching and to build up the church he is driven from his place by various means, one of PASTORLESS CHURCHES .- The facts which driven from his place by various means, one of which is "the abominable practice of withhold-ing the payment of his salary." The questions he is constantly confronted with are these "How smart are you?" "Can you make th "How smart are you?" "Can you make the rental of these pews pay the salary and all current expenses?" "Can you steer successfully between the Scylla of orthodoxy and the Charybdis of liberalism?" Unwelcome as the statement is, the position of the present average church appears to be that it is to succeed or fail according to the ability of the minister alone. The entire responsibility is to be thrown on him. The language of his call, "That you may be free from worldly cares, and avocations, we him. The larguage of his call, "That you may be free from worldly cares and avocations, we promise,"—a solemn promise that it is—is broken ruthlessly, and the postor for want of his salary, which is purposely withheld, sees nothing between humiliation and finding another church. Many churches, therefore, are without pastors simply because the churches drive them away. "The peril of a degraded ministry," is the title which the Iowa City Presbytery gives to its overture. The outside world will learn with some astonishment of the degree of feeling which exists in this matter. There is great force in the assertions often made that a want of the true religious feeling exists wherever a man is not unable to worship alone, and with little true religious feeling exists wherever a man is not unable to worship alone, and with little thought or care for what the minister says or his neighbor does. There has been introduced into churches of late a large deal of vulgar ambition for success as a church in a purely material way, and to imagine a congregation in the description of the control any "growing" American town which should be content to worship in a little rude stone church with ivy growing over it like one sees in England, would be to imagine and never to realize. Brick, mortar, and dressed stone, black walnut and upholstery, a high steeple with bells, and a big debt are much preferred. ARGYLL ON PRAYERS .- In asking that his

name be added to the membership of the Church Service Society of London, the Duke Church Service Society of London, the Duke of Argyll has written a letter to explain the views with which he does it. He should be glad, he says, to see among ministers and concregations the systematic, but not the exclusive use, of those forms of supplication of which the Lord's Prayer is both the type and great example. No one would deprecate more than he should the monotony and rigidity of a compulsory rule, or the abandonment of spontaneous prayer, and it is not the sub-titution of one for the other but a combination of the two that he desires most to see. Each has its own dangers. Any constant repetition of the own dangers. Any constant repetition of the same words has an inevitable tendency to besame words has an inevitable tendency to become mechanical, and, on the other hand,
spontaneous prayer, unless uttered under conditions both of form and spirit which are so
often wanted, is difficult for concregations
to join in, and sometimes even hard
to listen to. On the subject of church music
he is "old-fashioned enough to prefer greatly
the use of the human vace alone," and he the use of the human voice alone," and he looks with some regret on the notion which seems to be growing, that when an organ has been introduced, the best has been done that been introduced, the best has been done that need be done to give greater life and variety to public worship. He adds that it has been pointed out by a great authority that there is high traditional witness to an extensive use of the human voice in the worship of the early church. Again, he says that whether for prayer or for praise, whether for language addressed directly to God or for words yielding comfort and instruction to them who stand by and hear, there is no liturgy comstand by and hear, there is no liturgy com-parable with the Psalms, which are the com-mon heritage of the Christian Church. The more systematic reading of them would alone, he thinks, be a great reform.

Intolerance in Wales.—Lord Pernhyn's action in refusing to the Catvinistic Methodists of Catraryonshire, Wales, the use of a certain field near Bangor for the annual meeting known as the Sasswon, has created, it is said, a powerful feeling not only in Carparyonshire but throughout Wales generally. This denomination is the strongest in Northern Wales, and its meeting always attracts an immerse number of people always attracts an immense number of people from Liverpool and all the Welsh towns. Heretolore the use of a certain field has been granted by Lord Penrhyn as a sanction to the consent of the tenant, and it is hinted that his refusal now feat of his son and heir as the Conservative can didate for Parliament at the last election. When certain of the manisters and prominent church members lent their aid in securing the election of the Laberal candidate, it was mised that some difficulty would be found in securing the field for the next meeting, and after the terms had recently been agreed upon with the tenant, the case was laid before the manager of the Penrhyn estate, and a direct refusal was at once returned. A second applica-tion resulted with a like refusal. It was ther determined to apply directly to his Lordship, who lives in London. His answer was that under existing circumstances he did not see the expediency of allowing his tenant to let the in Bangor besides his which could no doubt be

THE AMERICAN FRIENDS.—At the recent yearly meeting of the English Society of Friends, one of a committee who had recently visited the Friends in this country gave an account of his observations. Criticisms had been made on the lack of discrimination often shown here in admissions to membership, and replied to them that much allowance should made for the circumstances of the American Friends. In a certain district he was told that scarcely any Friend possessed books of the total value of \$5. They have very few books indeed. Many of their ministers are out of pocket by their Gospel journeys, sometimes to a large amount. In this way their ministers are a self-denying body. The American Frieods generally have also, of late years, he said, shown an increasing disposition to contribute to the travelling expenses of their ministers, both at home and when journeying in Europe.

FREE SPEECHUPHELD.-Professor Robertso Smith, who aroused a flerce storm of attack in Scotland by an article in the "Encyclopædia Britannica," in which he deuted the Mosaic origin of Deuteronomy, has been restored to his chair in the Free Church Theological Seminary at Aberdeen. Professor Biackie celebrates this victory in the sonnet printed below :

victory in the sonnet printed below:

"Good news! good news! truth trainings after all!
Though fools are many, yet the wise are more,
Tho obgacs! fools still make the loudest baw!
And training—till the notes are counted o'en.
Stand firm, my soul, and hold no place for fear!
Though priests and bigots stand in stilf array.
Large-cearted Truth, with since for engineer,
O'er stock and stone will steam its conquering way.
God bless thee, Smith! Thou did'st not slink away
With shifty compromise from brait of battle;
No lov's rear thou heard'st in asses' bray,
No Jovian thunder in a baby's rattle;
True soldier thou, and faithful to thy Lord,
Who said—' Not peace I send you, but a sword.'"

BAD HABITS DISCARDED .- There are few vil-BAD HABITS DISCARDED.—There are few villages in the land where so little tobacco is used as in Oberlin, Ohio. It is doubted if twelve habitual smokers can be found among the twelve hundred members of the two leading churches, but public sentiment was recently called to the increase there of the sale of tobacco, and a meeting to take counsel in the matter was held. A candid and temperate talk on the evils of the habits of smoking and chewing was held, and several persons who chewing was held, and several persons who were confirmed in one or the other habit were led to abandon it, and the proprietors of two of the five or six stores that sold tobacco gave up the further sale of it cheerfully and without urging.

Canon Ryle's consecration as Bishop of the new See of Liverpool took place on 'riday, a week ago, in York Minster. Some disappoint-ment had been expressed at Liverpool that the consecration was not held either in Liver-pool or in Chester, so that the people might witness it. It is explained that the Away pool or in Chester, so that the people might witness it. It is explained that the Archblshop of York was willing to consecrate in Liverpool, but a suitable church could not be found, and to visit Chester was thought to be not desirable owing to the Bishop's domestic affliction and the

absence of the Dean-Dean Howson, who has been for some months in this country.

Tle number of delegates from this country to the Robert Raikes Sunday-school celebration, to be held in London and elsewhere in England, on June 28 to July 4, is 225. From Canada there are forty-six. The delegates from this city are the following: The Rev. Drs. John Hall, W. M. Taylor, E. A. Reed, S. H. Tyng, ir., and E. P. Rogers: the Revs. A. F. Schauffler, E. D. Murpby, and J. F. Potter; General Clinton B. Fisk, and Messrs. E. G. Mitchell, Ralph Wells, C. R. Blackall, C. B. Knevals, T. A. Brouwer, and James Talcott; and Miss M. Louisa Clauson, Miss Jenny B. Merrill, Miss Helena L. Davis, and Miss Carrie W. Pitkin.

At a recent English dinner, the health of Cardinal Newman having been drunk with great enthusiasm, the Cardinal, remarked, in acknowledging the compliment, that it was a matter of surprise to him, after having in a certain sense lived separate from the world, to find that there was such a feeling of kindness abroad toward him, and that people had for him what he might call romantic feelings. He was only a man like themselves, he added, and if it had been the will of Providence to do anything by him, it was what, of course, God might have done by any one else if it had pleased him.

The work of rebuilding Tremont Temple. Boston, makes rapid progress. By the middle or last of July it is expected that the structure will be ready for use, and that services will be held in it. The shops on the ground floor will be ready for their tenants much earlier, probably by the end of June. They have all been rented, and persons who loccupied rooms in the old building are expected to return. The top floor will be used by the Baptist Missionary Union.

A well-known English Wesleyan ministers who has a high rank among his fellows, is reported as saving he does not remember a single instance where a Methodist minister has forsaken Methodism for the religion of Rome. He adds that the names of all the members of the denomination whom he ever heard of as joining that Church he could more than count on the fingers of one hand. fingers of one hand.

A priest of the Greek Church at Athens has been making a special effort to stop the practice of keeping shops open on Sunday, and with very good success. His sermons were attentively listened to by the keepers of shops as well as by people in general, and the shop-keepers have been led to agree that hereafter the doors of their establishments shall be kept closed on the Day of Rest.

The Professorship at Auburn Theological Seminary, which was made vacant recently by the resignation of Dr. Herrick Johnson, and has been filled again by the election of Anson J. Upson, D. D., of Albany, is to have its fund increased by \$40,000, of which Dr. Willard, of Auburn, has already given \$10,000 \$10,000.

A dispatch from Rome affirms that Cardinal A dispatch from Rome amrins that Cardinal Newman's recent address on the conversion of England to Catholicism has "engaged the very carnest attention" of the Pope, and that he has caused his special thanks and congratulations to be conveyed to the Cardinal for it.

It has been decided by the English and American branches of the Bible Revision Commutee to print the revised edition of the Bible in paragraphs according to the sense, rather than it chapters and verses as is now done, and also to print the poetic parts in poetic measure. A report says that Edward Everett Hale has

withdrawn his name from the list of members of the St. Botolph Club, of Boston, giving as the reason that he cannot approve the use of wines and liquors furnished by the club. A Congregational minister at Brynamms England, with about seventy members of his congregation, has gone over to the Church of England.

Dr. Philip Schaff is announced to speak to-night in the Independent Catholic church at Twenty-eighth-st. and Madison-ave.

President Hayes has been elected a Vice-President of the American Bible Society.

CURRENT RELIGIOUS OPINION. .

STAGGERED BY JOSEPH COOK.

From The New-York Examiner and Chronicle (Baptist.)

The Observer is having a little scrimmage with Mr.
Joseph Cook about the latter's lecture on Spiritism. Mr. Cook denies emphatically that he is a Spiritist, and he certainly ought to know what his own beliefs are. But on the other hand, The Observer convicts him of having said things in his lectures that are hard to reconcile with his disclaimer. It offers Mr. Cook the use of its columns to explain this inconsistency, and it is to be hoped that the Boston lecturer will avail himself of this offer speedily. The Editor of The Observer is by no means the only person who was staggered by some things in Mr. Cook's last lectures.

TOB CCO IN THE MINIMTRY.
From The Boston Congregationalist.

The action of the recent Methodist General Conference in regard to tobacco was so absurd that we do not wonder at the fan which is being made of it. Whatever the brethren may have thought in the matter, they ought to have been consistent in their action. What they did was to decree that the use of tobacco shall be forbidden hereafter to candidates for the Methodist ministry. What they should have done was to leave the subject to their dividual conscience, where it properly belongs, or else to prohibit their whole ministry, old and young alike, veterans and candidates, from the bishops down, from using it. If it be wrong for the candidates, it is especially wrong for their seniors.

A BIT OF POOR HUMAN NATURE.

From The New York Christian at Work.

A correspondent from a neighboring city writes
us deprecating "the stingy economy which just
now bids fair to keep relatives and friends from the
grave, and which would reduce the funeral services
to the most barren rites." A consultation of the
directory shows the writer to be an undertaker.

FREE THOUGHT IN A CHURCH.

From The Christian Union.

Later information respecting the case of Professor Robertson Smith shows that decision to have been a far more decisive victory for religious free thoughs in the Church of Scotland than would appear from the first brief report. The question whether every professor in every the ological seminary is bound to quit his chair whenever he makes an advance in critical knowledge, is one of very great interest to all lovers of the truth in the Church and out of it. If it is necessary to endow a new seminary overy time a new discovery is made in criticism or a new thought is born in theology, the progress of critical and theological science will be both slow and expensive.

CAPTIOUS.

From The Baptist Weekly.

It is said the Roy. Dr. Duryea is to be the next Lyman Beecher Lecturer on Preaching at Yale College. If these lectures are continued for a hundred vears what an exhaustive treatment the topic will have! Certainly any one who can say anything original on preaching in a few years' time will be a phenomenon. Already most people think we have had about enough of it.

UNWISELY GRIEVED.
From The New-York Independent.
The Central Baptist is grieved that the pastor of the Second Baptist Church, in St. Louis, Dr. W. W. Boyd, should have been married in his own church by Dr. Eliot, a Unitarian. We don't understand why. Don't the laws of Missouri allow a Unitarian clergyman to solemnize marriage, and what better place is there than a church to solemnize it in ?

JOHN BROUGHAM'S GRAVE.

From The Boston Pilot (Catholic.)

"To all my friends I leave kind thoughts," said John Brougham in his last will and testament. It is a characteristic legacy, and all that poor Brougham had to give. He never kept enough of anything, but onarity and good nature, to have a surplus at the end. An incident at his burial illustrated his utter unselfishness through life. The friends who followed his body to reenwood were delayed there some time by the difficulty of cetting the coilin into the grave that had been opened for it, owing to the space being so narrow. While the friends wanted, the cause of the grave being so cramped was explained. Some years are a young actress, a stranger in the country, died in extreme poverty. It was found difficult to get enough money to bury her. Brougham had no money to give, but he offered a grave in his plot in Greenwood. His wife had been buried at one side of the plot, the friendless young actress at the other, and when the time came that he, too, should be buried, there was scarcely enough room remaining to receive his body. He had thought of himself last, as he always did, and his gererosity hampered him even in the grave.

PREACHERS AND TOBACCO.

From The New York Reaminer and Chronicle.
Probably a great many people who do not use tobacco themselves, nor regard favorably its man by
others, will all the same think it rather abound for
a denomination, or any part of a denomination, to
make such use the proof of a man's unitness to
preach the Gospel, and the sufficient cause for his
rejection by a conference as a candidate for ordination.